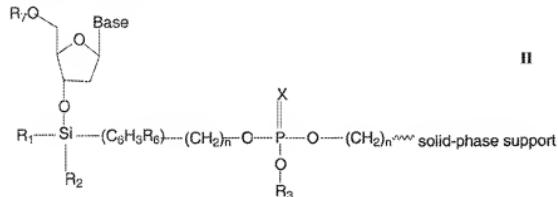


## ABSTRACT

Methods of synthesizing nucleic acid oligomers on a solid-phase support having a 3'-end nucleoside unit introduced thereon-as represented by formula II:



II

wherein  
  
of formula II represents a 2'-deoxyribonucleoside or its N-protected derivative, the substituent -O-(R<sub>1</sub>)Si(R<sub>2</sub>)-(C<sub>6</sub>H<sub>3</sub>R<sub>6</sub>)-(CH<sub>2</sub>)<sub>n</sub>-O-P(OR<sub>3</sub>)XO-(CH<sub>2</sub>)<sub>n</sub> is attached at the 3' position of the sugar moiety of the nucleoside substituent; each of R<sub>1</sub> and R<sub>2</sub> is an alkyl or optionally substituted aryl group, wherein the optionally substituted aryl group has a substituent selected from the group consisting of C<sub>1-4</sub> alkyl, nitro, cyano, halo and methoxyl; R<sub>3</sub> is a protecting group; X is S or O; R<sub>7</sub> is H or 4,4'-dimethoxytrityl; each n is an integer of from 1 to 5; and the solid-phase support has hydroxyl groups on its surface.